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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,805	08/18/2003	Kenji Kyuma	1232-4490US1	4769

27123 7590 03/19/2007
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EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/643,805

Applicant(s)

KYUMA, KENJI

Examiner

John M. Villecco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-38 is/are allowed.
- 6) ☒ Claim(s) 1-19 and 39-59 is/are rejected.
- 7) ☒ Claim(s) 28 and 35-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/208,546.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figures 4, 5A, 5B, 6, 7, 8, 9, and 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- On page 2, line 14, applicant recites the phrase “109 a rack”. It appears that the applicant meant to use the phrase – 114 a rack – since reference numeral 114 is used to represent the rack of the compensator lens group.
- On page 7, line 20, applicant recites the phrase “in step 401”. It appears that the applicant meant to use the phrase – in step 402 –, since the initialization in Figure 7 takes place in step 402.
- On page 9, line 23, applicant recites the phrase “to step 603”. It appears that the applicant meant to use the phrase – to step 608 –, since, as shown in Figure 9, when the “WIDE” switch is depressed operation moves to step 608.
- On page 3, lines 5-6, applicant recites the phrase “to step 901”. It appears that the applicant meant to use the phrase – in step 904 –, since, as shown in Figure

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2, the flowchart indicates that step 902 goes to step 904 if the zoom ring is not operated.

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

4. Claim 28 is objected to because of the following informalities:

- In line 4, of claim 28, applicant has recited the word “zoomingoperation”. It appears that this is a typographical error and that the applicant meant to use the phrase – zooming operation –.
- In lines 17- 18 of claim 35, applicant has recited the phrase “during said electronic variator means is operated”. This wording is unclear. For examination purposes it will be assumed that the applicant meant to use the phrase – when said electronic variator means is operated –.
- In lines 19-20 of claim 36, applicant has recited the phrase “during said electronic variator means is operated”. This wording is unclear. For examination purposes it will be assumed that the applicant meant to use the phrase – when said electronic variator means is operated –.
- In lines 19-20 of claim 37, applicant has recited the phrase “during said electronic variator means is operated”. This wording is unclear. For examination purposes

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it will be assumed that the applicant meant to use the phrase – when said electronic variator means is operated –.

- In lines 19-20 of claim 38, applicant has recited the phrase “during said electronic variator means is operated”. This wording is unclear. For examination purposes it will be assumed that the applicant meant to use the phrase – when said electronic variator means is operated –.
- In lines 5-6 of claim 38, applicant recites the phrase “said a lens device comprising”. This appears to be a typographical error and that the applicant meant to use the phrase – said lens device comprising –.

Appropriate correction is required.

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. **Claims 39-59 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-21 of prior U.S. Patent No. 6,650,367.** This is a double patenting rejection. Claims 39-59 of the present application are verbatim the same as claims 1-21 of U.S. Patent No. 6,650,367.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. **Claims 1-16, 18, and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Kaneda (Japanese Publ. No. 09-243899 A).**

9. Regarding *claim 1*, Kaneda discloses a variator lens (112) and a manual ring zooming member (506) for operating the variator lens (112), and a contact block for facilitating communication between a camera body (419) and interchangeable lens (418). Kaneda discloses that the lens microcomputer (410) and the camera microcomputer (409) exchange various signals through the contact block (col. 12, lines 64-65). Inherently, the contact block would have an information input means for receiving the information from the camera microcomputer (409). When the zoom ring has reached a telephoto side, the electronic zoom function is started in the camera. Thus, the camera has to inherently received position information from the lens. Additionally, the user can operate the zoom from the camera side using zoom operation means (157). Therefore, the contact block acts as both the information output means and the

information input means. Additionally, the variator lens group driving means (145) drives the lens group according to operation signals generated by the lens microcomputer, based on the inputted control information. The examiner is using the U.S Patent No. 5,973,857, which claims priority to Japanese Publ. No. 09-243899 A, when discussing various reference numbers and citations, since it is assumed that they are identical. An official translation of Japanese Publ. No. 09-243899 A has been ordered for use in subsequent office actions.

10. As for *claim 2*, Kaneda discloses that the information for moving the lens is information on a direction and speed of the external variator lens means. See column 13, lines 40-66.

11. With regard to *claim 3*, when the variator lens is placed at the tele end, the electronic zoom kicks in. See column 14, line 62 to column 15, line 40. Inherently, in order for the electronic zoom to begin working the information from the lens has to be output.

12. Regarding *claim 4*, Kaneda discloses a CCD (151) for imaging an object and outputting an imaging signal, a manual ring zooming member (506) for zooming the interchangeable lens (418), a zoom operation means (157) for operating zoom from the camera side, and a contact block for facilitating communication between the camera and interchangeable lens. Kaneda discloses that the camera microcomputer (409) receives operating information, and zoom position information from the lens microcomputer (410). See column 17, lines 14-39.

Inherently, the contact block would have an information input means for receiving the information from the lens microcomputer (410). The zoom operation means (157) is used to supply internal zoom operating information. Since the camera microcomputer is used to control the zooming operation of the interchangeable lens, it would inherently have an information output means. Furthermore, the system of Kaneda operates to control the zooming operation

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based upon external zoom operating information and the internal zoom operating information.

The examiner is using the U.S Patent No. 5,973,857, which claims priority to Japanese Publ. No. 09-243899 A, when discussing various reference numbers and citations, since it is assumed that they are identical. An official translation of Japanese Publ. No. 09-243899 A has been ordered for use in subsequent office actions.

13. As for **claim 5**, Kaneda discloses the use of an electronic zoom circuit (502) for electronically zooming the image signal. The camera microcomputer (409) serves as the electronic zooming control means.

14. With regard to **claim 6**, Kaneda discloses that the information for moving the lens is information on a direction and speed of the external variator lens means. See column 13, lines 40-66.

15. Regarding **claim 7**, Kaneda discloses that once the optical zooming reaches a tele end the electronic zoom takes over and performs electronic zooming. See Figures 10A-10C and column 15, lines 13-44.

16. As for **claim 8**, Kaneda discloses that when the ring member (506) and zoom switch (157) are operated simultaneously the operation of the ring member (506) would be given priority. In this case the zoom ring provides the first zoom operating information and the operating switch provides the second zoom operating information. See column 15, line 66 to column 16, line 4.

17. With regard to **claim 9**, Kaneda discloses that the order of precedence stated above in claim 8 can be interchanged. See column 16, lines 2-4.

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18. Regarding **claim 10**, Kaneda discloses a camera (419) having an interchangeable lens (418). The lens includes a variator lens (112) for performing a zooming operation, a manual zoom ring (506) disposed on the lens for moving the variator lens, a contact block which inherently includes a lens-side information output means and a lens-side information input means, a variator lens group driving means (145) for controlling the zooming operation of the variator lens means according to the received control information. The camera body includes a CCD (151) for imaging an object, a contact block which inherently would include a camera-body-side information input means and a camera-body-side output means for controlling the optical zooming. The camera-body-side also includes a camera microcomputer (409) for receiving the operating information to be supplied to the variator lens means. The camera microcomputer uses the inputs of the zoom operation member (157) and the information received from the interchangeable lens to control the optical zooming operation. The examiner is using the U.S Patent No. 5,973,857, which claims priority to Japanese Publ. No. 09-243899 A, when discussing various reference numbers and citations, since it is assumed that they are identical. An official translation of Japanese Publ. No. 09-243899 A has been ordered for use in subsequent office actions.

19. As for **claim 11**, Kaneda discloses the use of an electronic zoom circuit (502) for electronically zooming the image signal. The camera microcomputer (409) serves as the electronic zooming control means.

20. With regard to **claim 12**, Kaneda discloses that the information for moving the lens is information on a direction and speed of the external variator lens means. See column 13, lines 40-66.

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21. Regarding **claim 13**, when the variator lens is placed at the tele end, the electronic zoom kicks in. Inherently, in order for the electronic zoom to begin working the information from the lens has to be output.

22. As for **claim 14**, Kaneda discloses that once the optical zooming reaches a tele end the electronic zoom takes over and performs electronic zooming. See Figures 10A-10C and column 15, lines 13-44.

23. Regarding **claim 15**, Kaneda discloses that when the ring member (506) and zoom switch (157) are operated simultaneously the operation of the ring member (506) would be given priority. In this case the zoom ring provides the first zoom operating information and the operating switch provides the second zoom operating information. See column 15, line 66 to column 16, line 4.

24. With regard to **claim 16**, Kaneda discloses that the order of precedence stated above in claim 8 can be interchanged. See column 16, lines 2-4.

25. **Claim 18** is considered substantively equivalent to claim 1, with the added limitation in the preamble of storing a program on a computer readable medium for performing the claimed method steps. Please see the discussion of claim 1 on the preceding pages. Additionally, it is inherent that the microcomputer of the lens includes a program for carrying out the claimed steps.

26. **Claim 19** is considered substantively equivalent to claim 4, with the added limitation in the preamble of storing a program on a computer readable medium for performing the claimed method steps. Please see the discussion of claim 4 on the preceding pages. Additionally, it is

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inherent that the microcomputer of the camera includes a program for carrying out the claimed steps.

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. **Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneda**

(Japanese Publ. No. 09-243899 A) in view of Mabuchi et al. (U.S. Patent No. 5,485,208).

29. Regarding *claim 17*, as mentioned above in the discussion of claim 10 above, Kaneda discloses all of the limitations of the parent claim. However, Kaneda fails to disclose that the transmission is nearly equal to a cycle of a standard television synchronization signal. Mabuchi, on the other hand, discloses that it is well known in the art to perform communication between the lens and the camera. Mabuchi discloses a lens assembly (1) and a camera assembly (2) in which the lens assembly is interchangeable. Communication between the lens assembly and the camera assembly is done in synchronism with the vertical synchronization signal. By performing communication within a vertical synchronization period it is possible to achieve highly reliable control which is free of malfunction (col. 26, lines 54-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the lens and the camera to communicate during a cycle equivalent to a vertical sync pulse so that communication is highly reliable and free of malfunction.

Allowable Subject Matter

30. Claims 20-38 are allowed.

31. The following is an examiner's statement of reasons for allowance:

Regarding claim 20, the primary reason for allowance is that the prior art fails to teach or reasonably suggest that the lens device includes an information input means for receiving second zoom operating information and zooming inhibition information from the external device.

As for claim 24, the primary reason for allowance is that the prior art fails to teach or reasonably suggest that the camera device includes an information output means for outputting the second zoom control information and optical zooming inhibition information to be used for inhibiting a zooming operation of the external variator lens.

With regard to claim 28, the primary reason for allowance is that the prior art fails to teach or reasonably suggest that the lens side information input means receives second zoom information and zoom inhibition information and a camera body side information output means for outputting second zoom operating information and the optical zooming inhibition.

Regarding claim 33, the primary reason for allowance is that the prior art fails to teach or reasonably suggest inputting second zoom operating information and zooming inhibition information from an external device.

As for claim 34, the primary reason for allowance is that the prior art fails to teach or reasonably suggest outputting second zooming control information and optical zooming inhibition information.

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With regard to claim 35, the primary reason for allowance is that the prior art fails to teach or reasonably suggest that when the electronic variator means is operated the first device inhibits the optical variator means from operating.

Regarding claim 36, 37, and 38, the primary reason for allowance is that the prior art fails to teach or reasonably suggest that when the electronic variator means is operated, a signal causing the lens device to inhibit the optical variator lens from operating is transmitted to the lens device.

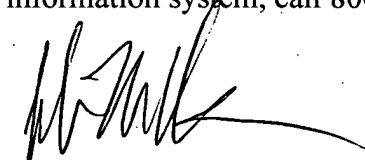
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John M. Villecco
March 8, 2007